

Hao Wang

List of Publications by Year in descending order

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227
papers

8,073
citations

44444

50
h-index

75989

78
g-index

228
all docs

228
docs citations

228
times ranked

4041
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning analysis of overweight traffic impact on survival life of asphalt pavement. <i>Structure and Infrastructure Engineering</i> , 2023, 19, 606-616.	2.0	5
2	Analysis and mitigation of hydroplaning risk considering spatial-temporal water condition on the pavement surface. <i>International Journal of Pavement Engineering</i> , 2023, 24, .	2.2	3
3	Computational analysis of skid resistance of aircraft tire on wet runway pavement with different groove depths. <i>Road Materials and Pavement Design</i> , 2023, 24, 1651-1668.	2.0	3
4	Computational investigation on surface water distribution and permeability of porous asphalt pavement. <i>International Journal of Pavement Engineering</i> , 2022, 23, 1226-1238.	2.2	9
5	SAPAVE: an improved semi-analytical FE program for dynamic viscoelastic analysis of asphalt pavement. <i>International Journal of Pavement Engineering</i> , 2022, 23, 3024-3035.	2.2	7
6	Dynamic elastic analysis of flexible pavements under moving vehicles: a semi-analytical finite element treatment. <i>Road Materials and Pavement Design</i> , 2022, 23, 1440-1450.	2.0	5
7	Multi-physics modelling of piezoelectric pavement system for energy harvesting under traffic loading. <i>International Journal of Pavement Engineering</i> , 2022, 23, 3647-3661.	2.2	2
8	Dynamic pavement response analysis under wide-base tyre considering vehicle-tyre“pavement interaction. <i>Road Materials and Pavement Design</i> , 2022, 23, 1650-1666.	2.0	7
9	Impact analysis of traffic loading on pavement performance using support vector regression model. <i>International Journal of Pavement Engineering</i> , 2022, 23, 3716-3728.	2.2	7
10	Numerical and experimental evaluation of adhesion properties of asphalt-aggregate interfaces using molecular dynamics simulation and atomic force microscopy. <i>Road Materials and Pavement Design</i> , 2022, 23, 1564-1584.	2.0	32
11	Molecular interaction of Asphalt-Aggregate interface modified by silane coupling agents at dry and wet conditions. <i>Applied Surface Science</i> , 2022, 572, 151365.	3.1	27
12	Life-cycle assessment and multi-criteria performance evaluation of pervious concrete pavement with fly ash. <i>Resources, Conservation and Recycling</i> , 2022, 177, 105969.	5.3	27
13	Probability prediction of pavement surface low temperature in winter based on bayesian structural time series and neural network. <i>Cold Regions Science and Technology</i> , 2022, 194, 103434.	1.6	13
14	Coarse grained modeling of nanostructure and asphaltene aggregation in asphalt binder using dissipative particle dynamics. <i>Construction and Building Materials</i> , 2022, 314, 125605.	3.2	22
15	Impact of warming temperature on asphalt pavement overlay performance and cost: case study in New Jersey. <i>Road Materials and Pavement Design</i> , 2022, 23, 2886-2899.	2.0	2
16	A hybrid energy harvesting system for self-powered applications in shared bicycles. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 51, 101891.	1.7	3
17	Improving the mechanical performance of poroelastic road surface with low polyurethane content through surface activation. <i>Construction and Building Materials</i> , 2022, 323, 126543.	3.2	5
18	Discrete-Element Modeling of Mean Texture Depth and Wearing Behavior of Asphalt Mixture. <i>Journal of Materials in Civil Engineering</i> , 2022, 34, .	1.3	6

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19	A study on renewed perspectives of electrified road for wireless power transfer of electric vehicles. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 158, 112110.	8.2	25
20	Theoretical and Experimental Investigation on Dynamic Response of Asphalt Pavement Under Vibration Compaction. <i>Frontiers in Materials</i> , 2022, 8, .	1.2	2
21	Molecular dynamics simulation of nano-crack formation in asphalt binder with different SARA fractions. <i>Molecular Simulation</i> , 2022, 48, 789-800.	0.9	5
22	Mechanistic“Empirical Analysis of Pavement Performance Considering Dynamic Axle Load Spectra Due to Longitudinal Unevenness. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 2600.	1.3	3
23	Application and validation of fly ash based geopolymer mortar as grouting material in porous asphalt concrete. <i>Construction and Building Materials</i> , 2022, 332, 127154.	3.2	12
24	Finite element analysis of thermal-induced reflective cracking in composite pavement with mitigation strategies. <i>Engineering Fracture Mechanics</i> , 2022, 266, 108396.	2.0	7
25	Non-intrusive movable energy harvesting devices: Materials, designs, and their prospective uses on transportation infrastructures. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 160, 112340.	8.2	8
26	Evaluation of Microwave Heating for Potential Applications in Hot In-Place Recycling of Asphalt Pavement. <i>Transportation Research Record</i> , 2022, 2676, 256-268.	1.0	3
27	Multi-aspect engineering properties and sustainability impacts of geopolymer pervious concrete. <i>Composites Part B: Engineering</i> , 2022, 242, 110035.	5.9	21
28	Molecular simulation and experimental analysis of interaction and compatibility between asphalt binder and Styrene-Butadiene-Styrene. <i>Construction and Building Materials</i> , 2022, 342, 128028.	3.2	12
29	Multi-objective optimization of pavement preservation strategy considering agency cost and environmental impact. <i>International Journal of Sustainable Transportation</i> , 2021, 15, 826-836.	2.1	12
30	Prediction of airfield pavement responses from surface deflections: comparison between the traditional backcalculation approach and the ANN model. <i>Road Materials and Pavement Design</i> , 2021, 22, 1930-1945.	2.0	31
31	Characterization of the interconnected pore and its relationship to the directional permeability of porous asphalt mixture. <i>Construction and Building Materials</i> , 2021, 269, 121233.	3.2	18
32	Life-cycle assessment of climate change impact on time-dependent carbon-footprint of asphalt pavement. <i>Transportation Research, Part D: Transport and Environment</i> , 2021, 91, 102697.	3.2	17
33	Finite Element Analysis of Composite Repair for Damaged Steel Pipeline. <i>Coatings</i> , 2021, 11, 301.	1.2	6
34	Three-dimensional microstructure based model for evaluating the coefficient of thermal expansion and contraction of asphalt concrete. <i>Construction and Building Materials</i> , 2021, 284, 122764.	3.2	9
35	Mechanistic-empirical analysis of asphalt pavement fatigue cracking under vehicular dynamic loads. <i>Construction and Building Materials</i> , 2021, 284, 122877.	3.2	17
36	Potential benefit of photovoltaic pavement for mitigation of urban heat island effect. <i>Applied Thermal Engineering</i> , 2021, 191, 116883.	3.0	15

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37	Comparison Analysis of Airfield Pavement Life Estimated from Different Pavement Condition Indexes. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2021, 147, 04021002.	0.8	8
38	Economic Feasibility Analysis of Charging Infrastructure for Electric Ground Fleet in Airports. <i>Transportation Research Record</i> , 2021, 2675, 1-12.	1.0	2
39	Dynamic response analysis of airport pavements during aircraft taxiing for evaluating pavement bearing capacity. <i>Journal of Zhejiang University: Science A</i> , 2021, 22, 736-750.	1.3	6
40	Evaluation of Tire Rolling Resistance from Tire-Deformable Pavement Interaction Modeling. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2021, 147, .	0.8	4
41	Influence of loading frequency on mechanical properties of unbound granular materials via repeated load tests. <i>Construction and Building Materials</i> , 2021, 301, 124098.	3.2	5
42	Energy harvesting array materials with thin piezoelectric plates for traffic data monitoring. <i>Construction and Building Materials</i> , 2021, 302, 124147.	3.2	6
43	Strains Comparisons of Unbound Base/Subbase Layer Using Three Elasto-Plastic Models under Repeated Loads. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 9251.	1.3	1
44	Geopolymer pervious concrete modified with granulated blast furnace slag: Microscale characterization and mechanical strength. <i>Journal of Cleaner Production</i> , 2021, 328, 129469.	4.6	24
45	Life-Cycle Assessment of Carbon Footprint of Bike-Share and Bus Systems in Campus Transit. <i>Sustainability</i> , 2021, 13, 158.	1.6	9
46	Damage Evaluation of Poro-Elastic Road Surface with Low Polyurethane Content. <i>Journal of Testing and Evaluation</i> , 2021, 49, 134-146.	0.4	2
47	Computational investigation of hydroplaning risk of wide-base truck tyres on roadway. <i>International Journal of Pavement Engineering</i> , 2020, 21, 122-133.	2.2	15
48	Directional distribution of three-dimensional connected voids in porous asphalt mixture and flow simulation of permeability anisotropy. <i>International Journal of Pavement Engineering</i> , 2020, 21, 1550-1562.	2.2	24
49	Performance evaluation of bio-based asphalt and asphalt mixture and effects of physical and chemical modification. <i>Road Materials and Pavement Design</i> , 2020, 21, 1470-1489.	2.0	22
50	A case study on geogrid-reinforced and pile-supported widened highway embankment. <i>Geosynthetics International</i> , 2020, 27, 261-274.	1.5	35
51	Quantifying greenhouse gas emission of asphalt pavement preservation at construction and use stages using life-cycle assessment. <i>International Journal of Sustainable Transportation</i> , 2020, 14, 25-34.	2.1	41
52	Numerical simulation of dynamic repetitive load test of unbound aggregate using precision unbound material analyzer. <i>Road Materials and Pavement Design</i> , 2020, 21, 1675-1693.	2.0	8
53	Multi-wheel gear loading effect on load-induced failure potential of airfield flexible pavement. <i>International Journal of Pavement Engineering</i> , 2020, 21, 805-816.	2.2	11
54	Molecular dynamics simulation of diffusion coefficients between different types of rejuvenator and aged asphalt binder. <i>International Journal of Pavement Engineering</i> , 2020, 21, 966-976.	2.2	51

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55	Finite element modeling of mechanical responses of concrete pavement with partial depth repair. <i>Construction and Building Materials</i> , 2020, 240, 117960.	3.2	6
56	Asphalt pavement modulus backcalculation using surface deflections under moving loads. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2020, 35, 1246-1260.	6.3	22
57	Optimization of tire tread pattern based on flow characteristics to improve hydroplaning resistance. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2020, 234, 2961-2974.	1.1	5
58	Self-healing of asphalt binder with cohesive failure: Insights from molecular dynamics simulation. <i>Construction and Building Materials</i> , 2020, 262, 120538.	3.2	36
59	Exploring the energy-saving potential of electromagnetic induction pavement via magnetic concentrating technique. <i>Energy</i> , 2020, 211, 118650.	4.5	14
60	Analysis of Pore Characteristics and Flow Pattern of Open-Graded Asphalt Mixture in Different Directions. <i>Journal of Materials in Civil Engineering</i> , 2020, 32, .	1.3	8
61	Mechanistic Modeling and Economic Analysis of Piezoelectric Energy Harvesting Potential in Airport Pavements. <i>Transportation Research Record</i> , 2020, 2674, 64-75.	1.0	6
62	Analysis of Temperature Variation and Thermally-Induced Reflective Cracking Potential in Composite Pavements. <i>Transportation Research Record</i> , 2020, 2674, 177-188.	1.0	5
63	Flexible Pavement Response Analysis under Dynamic Loading at Different Vehicle Speeds and Pavement Surface Roughness Conditions. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2020, 146, 04020040.	0.8	23
64	Mechanical properties of metakaolin-based geopolymer with glass fiber reinforcement and vibration preparation. <i>Journal of Non-Crystalline Solids</i> , 2020, 544, 120173.	1.5	20
65	Formation Mechanism of Residual Stresses in Micro-Injection Molding of PMMA: A Molecular Dynamics Simulation. <i>Polymers</i> , 2020, 12, 1368.	2.0	13
66	Dynamic Pavement Response Analysis under Moving Truck Loads with Random Amplitudes. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2020, 146, 04020020.	0.8	17
67	Mechanical Properties of Poroelastic Road Surface with Different Material Compositions. <i>Journal of Materials in Civil Engineering</i> , 2020, 32, .	1.3	10
68	Developed compound flame retardant for bitumen based on thermal properties of four components. <i>Construction and Building Materials</i> , 2020, 250, 118692.	3.2	9
69	Development of elasto-plastic constitutive model for unbound granular materials under repeated loads. <i>Transportation Geotechnics</i> , 2020, 23, 100347.	2.0	14
70	Life-cycle assessment of asphalt pavement recycling. , 2020, , 77-93.		4
71	Piezoelectric energy harvesting from pavement. , 2020, , 367-382.		7
72	A prediction model of permanent strain of unbound gravel materials based on performance of single-size gravels under repeated loads. <i>Construction and Building Materials</i> , 2020, 246, 118492.	3.2	18

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73	Moisture effect on nanostructure and adhesion energy of asphalt on aggregate surface: A molecular dynamics study. <i>Applied Surface Science</i> , 2020, 510, 145435.	3.1	103
74	Prediction of Viscoelastic Pavement Responses under Moving Load and Nonuniform Tire Contact Stresses Using 2.5-D Finite Element Method. <i>Mathematical Problems in Engineering</i> , 2020, 2020, 1-16.	0.6	4
75	Research on transversely isotropic permeability of asphalt pavement: Laboratory tests and computational simulation. <i>Construction and Building Materials</i> , 2020, 251, 118958.	3.2	9
76	Backcalculation of Airfield Pavement Layer Moduli Under HWD Testing. <i>Lecture Notes in Civil Engineering</i> , 2020, , 666-675.	0.3	1
77	Life-Cycle Cost Analysis of Pay Adjustment for Initial Smoothness of Asphalt Pavement Overlay. <i>Journal of Testing and Evaluation</i> , 2020, 48, 1350-1364.	0.4	6
78	Evaluating engineering properties and environmental impact of pervious concrete with fly ash and slag. <i>Journal of Cleaner Production</i> , 2019, 237, 117714.	4.6	81
79	Alleviating urban heat island effect using high-conductivity permeable concrete pavement. <i>Journal of Cleaner Production</i> , 2019, 237, 117722.	4.6	76
80	Evaluation of Clustered Traffic Inputs for Mechanistic-Empirical Pavement Design: Case Study in New Jersey. <i>Transportation Research Record</i> , 2019, 2673, 332-348.	1.0	15
81	Geopolymer, green alkali activated cementitious material: Synthesis, applications and challenges. <i>Construction and Building Materials</i> , 2019, 224, 930-949.	3.2	190
82	Microstructural Modeling of Rheological Mechanical Response for Asphalt Mixture Using an Image-Based Finite Element Approach. <i>Materials</i> , 2019, 12, 2041.	1.3	12
83	Compatibility of cured phase-inversion waterborne epoxy resin emulsified asphalt. <i>Construction and Building Materials</i> , 2019, 229, 116942.	3.2	44
84	Mass loss evolution of bituminous fractions at different heating rates and constituent conformation of emitted volatiles. <i>Energy Science and Engineering</i> , 2019, 7, 2782-2796.	1.9	9
85	Development of an overweight vehicle permit fee structure for Illinois. <i>Transport Policy</i> , 2019, 82, 26-35.	3.4	4
86	Experimental and Simulation Study of Phase Microstructure and Storage Stability of Asphalt Modified with Ethylene-Vinyl Acetate. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, .	1.3	8
87	Damage mechanism of soil-rock mixture after freeze-thaw cycles. <i>Journal of Central South University</i> , 2019, 26, 13-24.	1.2	34
88	Combustion kinetics of asphalt binder components and the release processes of gaseous products. <i>Combustion and Flame</i> , 2019, 206, 322-333.	2.8	32
89	Analysis of thermal conductivity of porous concrete using laboratory measurements and microstructure models. <i>Construction and Building Materials</i> , 2019, 218, 90-98.	3.2	45
90	Prediction of Bridge Component Ratings Using Ordinal Logistic Regression Model. <i>Mathematical Problems in Engineering</i> , 2019, 2019, 1-11.	0.6	18

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91	Pavement temperature prediction: Theoretical models and critical affecting factors. <i>Applied Thermal Engineering</i> , 2019, 158, 113755.	3.0	110
92	Characterizing Skeleton Structure and Stacking Properties of Continuous and Gap Graded Aggregate Mixtures. <i>Advances in Civil Engineering</i> , 2019, 2019, 1-14.	0.4	2
93	Performance Analysis of Piezoelectric Energy Harvesting in Pavement: Laboratory Testing and Field Simulation. <i>Transportation Research Record</i> , 2019, 2673, 115-124.	1.0	26
94	Influence of the chemical composition and the morphology of crumb rubbers on the rheological and self-healing properties of bitumen. <i>Construction and Building Materials</i> , 2019, 210, 555-563.	3.2	21
95	Improved Chemical System for Molecular Simulations of Asphalt. <i>Energy & Fuels</i> , 2019, 33, 3187-3198.	2.5	40
96	Improvement of Asphalt-Aggregate Adhesion Using Plant Ash Byproduct. <i>Materials</i> , 2019, 12, 605.	1.3	21
97	Performance evaluation of metakaolin geopolymer modified by different solid wastes. <i>Journal of Cleaner Production</i> , 2019, 226, 114-121.	4.6	45
98	Laboratory investigation of phase change effect of polyethylene glycol on asphalt binder and mixture performance. <i>Construction and Building Materials</i> , 2019, 212, 1-9.	3.2	52
99	Thermal behaviors and harmful volatile constituents released from asphalt components at high temperature. <i>Journal of Hazardous Materials</i> , 2019, 373, 741-752.	6.5	55
100	Prediction of dynamic modulus of asphalt mixture using micromechanical method with radial distribution functions. <i>Materials and Structures/Materiaux Et Constructions</i> , 2019, 52, 1.	1.3	76
101	Structural assessment of asphalt pavement condition using backcalculated modulus and field data. <i>Construction and Building Materials</i> , 2019, 211, 943-951.	3.2	26
102	Phase field simulation and microscopic observation of phase separation and thermal stability of polymer modified asphalt. <i>Construction and Building Materials</i> , 2019, 204, 132-143.	3.2	28
103	Evaluation of Vehicle Braking Performance on Wet Pavement Surface using an Integrated Tire-Vehicle Modeling Approach. <i>Transportation Research Record</i> , 2019, 2673, 295-307.	1.0	43
104	Phase behavior and hot storage characteristics of asphalt modified with various polyethylene: Experimental and numerical characterizations. <i>Construction and Building Materials</i> , 2019, 203, 608-620.	3.2	55
105	Comparison analysis of dynamic modulus of asphalt mixture: indirect tension and uniaxial compression test. <i>Transportmetrica A: Transport Science</i> , 2019, 15, 165-178.	1.3	12
106	Laboratory testing and analysis of dynamic and static resilient modulus of subgrade soil under various influencing factors. <i>Construction and Building Materials</i> , 2019, 195, 178-186.	3.2	49
107	Energy harvesting and evaluation of a novel piezoelectric bridge transducer. <i>Sensors and Actuators A: Physical</i> , 2019, 285, 348-354.	2.0	37
108	Preparation and effectiveness of composite phase change material for performance improvement of Open Graded Friction Course. <i>Journal of Cleaner Production</i> , 2019, 214, 259-269.	4.6	48

#	ARTICLE	IF	CITATIONS
109	Investigation of unbound granular material behavior using precision unbound material analyzer and repeated load triaxial test. <i>Transportation Geotechnics</i> , 2019, 18, 1-9.	2.0	15
110	Effect of drying procedures on pore structure and phase evolution of alkali-activated cements. <i>Cement and Concrete Composites</i> , 2019, 96, 194-203.	4.6	95
111	FEM-BEM analysis of tyre-pavement noise on porous asphalt surfaces with different textures. <i>International Journal of Pavement Engineering</i> , 2019, 20, 1090-1097.	2.2	29
112	Deterministic and probabilistic life-cycle cost analysis of pavement overlays with different pre-overlay conditions. <i>Road Materials and Pavement Design</i> , 2019, 20, 58-73.	2.0	16
113	Development of ANN-GA program for backcalculation of pavement moduli under FWD testing with viscoelastic and nonlinear parameters. <i>International Journal of Pavement Engineering</i> , 2019, 20, 490-498.	2.2	69
114	Numerical Simulation of an Indirect Tensile Test for Asphalt Mixtures Using Discrete Element Method Software. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	31
115	Investigation of Prony series model related asphalt mixture properties under different confining pressures. <i>Construction and Building Materials</i> , 2018, 166, 147-157.	3.2	22
116	Performance Comparison between Different Sourced Bioasphalts and Asphalt Mixtures. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	38
117	Shear Strength between Poroelastic Road Surface and Sublayer with Different Bonding Agents. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	20
118	Energy harvesting technologies in roadway and bridge for different applications – A comprehensive review. <i>Applied Energy</i> , 2018, 212, 1083-1094.	5.1	341
119	Impact of minerals and water on bitumen-mineral adhesion and debonding behaviours using molecular dynamics simulations. <i>Construction and Building Materials</i> , 2018, 171, 214-222.	3.2	141
120	Evaluation of durability and functional performance of porous polyurethane mixture in porous pavement. <i>Journal of Cleaner Production</i> , 2018, 188, 12-19.	4.6	118
121	Prediction of Asphalt Pavement Responses from FWD Surface Deflections Using Soft Computing Methods. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2018, 144, 04018014.	0.8	22
122	Life cycle assessment of asphalt pavement recycling for greenhouse gas emission with temporal aspect. <i>Journal of Cleaner Production</i> , 2018, 187, 148-157.	4.6	73
123	Fracture simulation of asphalt concrete with randomly generated aggregate microstructure. <i>Road Materials and Pavement Design</i> , 2018, 19, 1674-1691.	2.0	25
124	Molecular dynamics study of rejuvenator effect on RAP binder: Diffusion behavior and molecular structure. <i>Construction and Building Materials</i> , 2018, 158, 1046-1054.	3.2	82
125	Experimental study on anti-icing and deicing performance of polyurethane concrete as road surface layer. <i>Construction and Building Materials</i> , 2018, 161, 598-605.	3.2	95
126	Influence of Temperature on the Mechanical Response of Asphalt Mixtures Using Microstructural Analysis and Finite-Element Simulations. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	35

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127	Experimental measurement and microstructure-based simulation of thermal conductivity of unbound aggregates. <i>Construction and Building Materials</i> , 2018, 189, 8-18.	3.2	23
128	Diffusion and interaction mechanism of rejuvenating agent with virgin and recycled asphalt binder: a molecular dynamics study. <i>Molecular Simulation</i> , 2018, 44, 1433-1443.	0.9	80
129	Laboratory testing and numerical simulation of piezoelectric energy harvester for roadway applications. <i>Applied Energy</i> , 2018, 224, 438-447.	5.1	87
130	Expansion and contraction of clogged open graded friction course exposed to freeze-thaw cycles and degradation of mechanical performance. <i>Construction and Building Materials</i> , 2018, 182, 167-177.	3.2	18
131	Evaluation of Self-Healing Performance of Asphalt Concrete for Low-Temperature Fracture Using Semicircular Bending Test. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	27
132	Random Modeling of Three-Dimensional Heterogeneous Microstructure of Asphalt Concrete for Mechanical Analysis. <i>Journal of Engineering Mechanics - ASCE</i> , 2018, 144, .	1.6	40
133	Interface Shear Performance between Porous Polyurethane Mixture and Asphalt Sublayer. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 623.	1.3	18
134	Life-cycle analysis of repair of concrete pavements. , 2018, , 723-738.		2
135	Computational Analysis of Thermal Conductivity of Asphalt Mixture Based on a Multiscale Mathematical Model. <i>Journal of Engineering Mechanics - ASCE</i> , 2018, 144, .	1.6	13
136	Experimental Study of High-Performance Deicing Asphalt Mixture for Mechanical Performance and Anti-Icing Effectiveness. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	28
137	Image-aided random aggregate packing for computational modeling of asphalt concrete microstructure. <i>Construction and Building Materials</i> , 2018, 177, 467-476.	3.2	38
138	Investigation of rheological and chemical properties asphalt binder rejuvenated with waste vegetable oil. <i>Construction and Building Materials</i> , 2018, 180, 455-463.	3.2	118
139	Evaluation of Hydroplaning Risk on Permeable Friction Course using Tire-Water-Pavement Interaction Model. <i>Transportation Research Record</i> , 2018, 2672, 408-417.	1.0	27
140	Flexible Pavement Interface Bonding: Theoretical Analysis and Shear-Strength Measurement. <i>Journal of Testing and Evaluation</i> , 2018, 46, 99-107.	0.4	4
141	Virtual testing of asphalt mixture with two-dimensional and three-dimensional random aggregate structures. <i>International Journal of Pavement Engineering</i> , 2017, 18, 824-836.	2.2	56
142	Numerical evaluation of surface-initiated cracking in flexible pavement overlays with field observations. <i>Road Materials and Pavement Design</i> , 2017, 18, 221-234.	2.0	15
143	Molecular dynamics simulation of asphalt-aggregate interface adhesion strength with moisture effect. <i>International Journal of Pavement Engineering</i> , 2017, 18, 414-423.	2.2	111
144	Laboratory Investigation of Crumb Rubber Modified Asphalt Binder and Mixtures with Warm-Mix Additives. <i>International Journal of Civil Engineering</i> , 2017, 15, 185-194.	0.9	46

#	ARTICLE	IF	CITATIONS
145	Numerical investigation into the effect of air voids on the anisotropy of asphalt mixtures. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 473-481.	0.4	5
146	Investigation of permeability of open graded asphalt mixture considering effects of anisotropy and two-dimensional flow. Construction and Building Materials, 2017, 145, 318-325.	3.2	32
147	Effects of polymerized sulfur on rheological properties, morphology and stability of SBS modified asphalt. Construction and Building Materials, 2017, 150, 860-871.	3.2	75
148	Property Characterization of Asphalt Binders and Mixtures Modified by Different Crumb Rubbers. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	124
149	Finite element modeling and parametric analysis of viscoelastic and nonlinear pavement responses under dynamic FWD loading. Construction and Building Materials, 2017, 141, 23-35.	3.2	85
150	Optimized design of layered bridge transducer for piezoelectric energy harvesting from roadway. Energy, 2017, 141, 1133-1145.	4.5	82
151	Computational Analysis of Thermal Conductivity of Asphalt Mixture Using Virtually Generated Three-Dimensional Microstructure. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	19
152	Experimental study on rheological characteristics and performance of high modulus asphalt binder with different modifiers. Construction and Building Materials, 2017, 155, 26-36.	3.2	52
153	Rheological properties and anti-aging performance of asphalt binder modified with wood lignin. Construction and Building Materials, 2017, 151, 801-808.	3.2	141
154	Life-cycle cost analysis of optimal timing of pavement preservation. Frontiers of Structural and Civil Engineering, 2017, 11, 17-26.	1.2	19
155	Heterogeneity effect of mechanical property on creep behavior of asphalt mixture based on micromechanical modeling and virtual creep test. Mechanics of Materials, 2017, 104, 49-59.	1.7	70
156	Investigation of shear failure in airport asphalt pavements under aircraft ground manoeuvring. Road Materials and Pavement Design, 2017, 18, 1288-1303.	2.0	16
157	Probabilistic Modeling of Performance-Related Pay Adjustment for In-Place Air-Void Contents of Asphalt Pavements. Journal of Infrastructure Systems, 2017, 23, .	1.0	5
158	Molecular dynamics study of oxidative aging effect on asphalt binder properties. Fuel, 2017, 188, 1-10.	3.4	354
159	Modeling and testing of road surface aggregate wearing behaviour. Construction and Building Materials, 2017, 131, 129-137.	3.2	36
160	Analytical approach for evaluating temperature field of thermal modified asphalt pavement and urban heat island effect. Applied Thermal Engineering, 2017, 113, 739-748.	3.0	114
161	Mechanism and Performance Evaluation of Different Crumb Rubber Modified Asphalt. DEStech Transactions on Engineering and Technology Research, 2017, , .	0.0	2
162	Influences by Air Voids on the Low-Temperature Cracking Property of Dense-Graded Asphalt Concrete Based on Micromechanical Modeling. Advances in Materials Science and Engineering, 2016, 2016, 1-10.	1.0	13

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